

SEMI-AUTOMATIC JAR OPENER

BACKGROUND OF THE INVENTION

Field of the invention:

The present invention relates to a semi-automatic jar opener [adapted for] which allows to unscrew the [lid from any size of] jars [coming from food stores or groceries] without physical [strenght] strength.

Description of the related art:

A search of prior art records has unveiled the following Canadian patent:

1. No. CA 432,070 issued in 1945 to Gaulin.

The patent to Gaulin is probably the most relevant.

As is known, many persons use the bottle and jar opener from Gaulin.

As can be seen, the problem encountered is that the jar opener is not semi-automatic, and [is] not conceived for the elders [and for the] or handicapped persons having little or no physical strength, because [they] the person must [to] take the jar or [the] bottle in [the] his left hand [,] and take the opener in [the] his right hand [, place] in placing it on top of the cover, and make a twist of the wrist in anticlockwise direction for remove the cover from any bottle or jar.

To overcome the above-mentioned problem, the applicant has developed a semi-automatic jar opener [used for] allowing the handicapped persons, elders or other persons to unscrew the [lid from any size of] jars without physical [strenght] strength.

Summary of the invention:

[The gist of the invention is therefore to provide a semi-automatic jar opener allowing to handicapped persons, elders and the other persons to unscrew the lid from any size of jars coming from food stores or groceries without physical strenght.]

The present invention shows a semi-automatic jar opener made up of a lower part including a run button activating an electric motor mounted under the lower part, which [allowing] allows a lower plate to turn and activate a gear rack allowing the lower jaws provided with non-skid rubber strips to squeeze [the] a jar [in accordance with] according the desired size, [and to make turn it, and of an upper part allowing to adjust manually the height of jar, and when the plate from the lower part turns, the jaws squeeze the lid for unscrew the jar.] when the jar turns the friction rubber strips prevent it from sliding, and when the jar is unscrewed the electric motor stops automatically.

The vertical jagged posts are mounted onto the lower part and engaged inside the apertures of an upper part including a base with an extension on which is mounted a shaft passing through gears and knobs, which in pulling on the knob including a locking means it allows to lower manually the upper part onto the posts, which includes an upper plate provided with the friction rubber strips pressing a lid and preventing it to slide, when the lower plate turns it allows automatically the jar and the upper plate to turn, which activates a gear rack allowing the upper jaws provided with non-skid rubber strips to squeeze the lid until the jar be unscrewed.

The extension of the base from the upper part allows the means locking to block the knob when the jar is removed from the semi-automatic jar opener.

Advantages of the invention:

- No physical [strenght] strength required from the user;
- Can be operated only with one hand;
- Easy to operate; and
- Does not require to be fixed at any surface.

Brief description of the several views of the drawing(s):

Figure 1 is a front perspective view of the semi-automatic jar opener showing [the] a jar installed;

Figure 2 is a front elevational view thereof;

Figure 3 is a perspective view showing the lower part from the semi-automatic jar opener;

Figure 4 is a perspective view showing the upper part from the semi-automatic jar opener;

Figure 5 is a cut view of the lower mechanism of the semi-automatic jar opener; and

Figure 6 is a cut view of the upper mechanism of the semi-automatic jar opener.

Detailed description of the invention:

As shown in figures 1, 2, 3 and 5, a semi-automatic jar opener (A) [comprising] made up of a lower part including a run button (16) activating an electric motor (1) [which is] mounted under the lower part [provided with a run button (16) allowing to activate a gear rack (10), the first jaws (4) provided with the first non-skid rubber strips (19) for squeeze a jar (2), and the first friction rubber strips (8)] , which allows a lower plate (3) to turn and activate a gear rack (10) allowing the lower jaws (4) provided with

non-skid rubber strips (19) to squeeze a jar (2) according to the desired size,
when the jar (2) turns the friction rubber strips (8) prevent [the sliding of
jar] it from sliding, [and the electric motor (1) stops to operate when the lid
of jar (2) shown in phantom lines is unscrewed.] and when the jar is
unscrewed the electric motor (1) stops automatically.

[The electric motor (1) makes turn the first plate (3) on which rest on
the jar (2), which makes turn automatically the second plate (7) when it is
rest against the lid of jar (2) making close the second jaws (6) provided with
the second non-skid rubber strips (20) maintaining firmly the lid of jar in
position, the second friction rubber strips (18) prevent the sliding of lid ,
and when the jar (2) and the second plate (7) turn, the second jaws (6) close
firmly on the lid until it reaches the required torsion for unscrew the jar.]

As shown in figures 1, 2, 3, 4 and 6, [the semi-automatic jar opener
(A) is also made up of] the vertical jagged posts (13) are mounted onto the
lower part and engaged inside the apertures of an upper part [joined to the
lower part by the serrated vertical post (13) allowing to adjust manually the
height of jar (2) by means of a shaft (21), the gears (12) and knobs (11), and
which in pulling on the knob (11) provided with a means locking (15), it
allows to serrated vertical post (13) to be unblocked for adjust manually the

height of jar (2).] including a base (17) with an extension (14) on which is mounted a shaft (5) passing through gears (12) and knobs (11), which in pulling on the knob (11) including a locking means (15) it allows to lower manually the upper part onto the posts (13), which includes an upper plate (7) provided with the friction rubber strips (18) pressing a lid and preventing it to slide, when the lower plate (3) turns it allows automatically the jar (2) and the upper plate (7) to turn, which activates a gear rack (9) allowing the upper jaws (6) provided with non-skid rubber strips (20) to squeeze the lid until the jar (2) be unscrewed.

The extension (14) of the base (17) from the upper part allows [to] the means locking (15) to block the knob (11) when the jar (2) is removed from the semi-automatic jar opener (A).

CLAIM (S)

The embodiments of the invention for which an exclusive property or privilege is claimed, are defined as follows:

I claim:

[2. A semi-automatic jar opener comprising two parts, which a lower part is made up of an electric motor which is mounted under the lower part provided with a run button allowing to activate a gear rack, the first jaws provided with the first non-skid rubber strips for squeeze a jar, the first friction rubber strips prevent the sliding of jar, and the electric motor stops to operate when the lid of jar is unscrewed. The electric motor makes turn the first plate on which rest on the jar, which makes turn automatically a second plate when it is rest against said lid of jar making close the second jaws provided with the second non-skid rubber strips maintaining firmly said lid of jar in position, the second friction rubber strips prevent the sliding of said lid and when the jar and the second plate turn, the jaws close firmly on said lid until it reaches the required torsion for unscrew the jar.]

[3. The semi-automatic jar opener of the claim 2 is also made up of an upper part joined to the lower part by the serrated vertical post allowing to adjust manually the height of said jar by means of a shaft, the gears and knobs, and

which in pulling on the knob provided with a means locking, it allows to said serrated vertical post to be unblocked for adjust manually the height of said jar. The extension of the base from the upper part allows to said means locking to block said knob when said jar is removed from said semi-automatic jar opener.]

4. A semi-automatic jar opener made up of a lower part including a run button activating an electric motor mounted under said lower part, which allows a lower plate to turn and activate a gear rack allowing the lower jaws provided with non-skid rubber strips to squeeze a jar according to the desired size, when said jar turns the friction rubber strips prevent it from sliding, and when the jar is unscrewed said electric motor stops automatically.

5. The semi-automatic jar opener of the claim 4 includes the vertical jagged posts which are mounted onto said lower part and engaged inside the apertures of an upper part including a base with an extension on which is mounted a shaft passing through gears and knobs, which in pulling on the knob including a locking means it allows to lower manually said upper part onto the posts.

6. The upper part of the claim 5 includes an upper plate provided with the

friction rubber strips pressing a lid and preventing it to slide, when said lower plate turns it allows automatically said jar and said upper plate to turn, and which activates a gear rack allowing the upper jaws provided with non-skid rubber strips to squeeze the lid until the jar be unscrewed.

7. The extension of the base from the upper part of the claim 5 allows said means locking to block the knob when the jar is removed from said semi-automatic jar opener.

SEMI-AUTOMATIC JAR OPENER

ABSTRACT OF THE DISCLOSURE

The present disclosure is a semi-automatic jar opener made up of a lower part [provided with] including a run button activating an electric motor mounted under the lower part, which [allowing] allows a lower plate to turn and activate a gear rack allowing the lower jaws provided with non-skid rubber strips to squeeze [the] a jar [in accordance with] according to the desired size, [and to make turn it, and of an upper part allowing to adjust manually the height of jar, and when the plate from the lower part turns, the jaws squeeze the lid for unscrew the jar.] when the jar turns the friction rubber strips prevent it from sliding, and when the jar is unscrewed the electric motor stops automatically.

The vertical jagged posts are mounted onto the lower part and engaged inside the apertures of an upper part including a base with an extension on which is mounted a shaft passing through gears and knobs, which in pulling on the knob including a locking means it allows to lower manually the upper part onto the posts, which includes an upper plate provided with the friction rubber strips pressing a lid and preventing it to slide, when the lower plate turns it allows automatically the jar and the

upper plate to turn, which activates a gear rack allowing the upper jaws
provided with non-skid rubber strips to squeeze the lid until the jar be
unscrewed.

The extension of the base from the upper part allows the means
locking to block the knob when the jar is removed from the semi-automatic
jar opener.

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To overcome the above-mentioned problem, the applicant has developped a semi-automatic jar opener allowing the handicapped persons,

elders or other persons to unscrew the jars without physical strength.

Summary of the invention:

The present invention shows a semi-automatic jar opener made up of a lower part including a run button activating an electric motor mounted under the lower part, which allows a lower plate to turn and activate a gear rack allowing the lower jaws provided with non-skid rubber strips to squeeze a jar according to the desired size, when the jar turns the friction rubber strips prevent it from sliding, and when the jar is unscrewed the electric motor stops automatically.

The vertical jagged posts are mounted onto the lower part and engaged inside the apertures of an upper part including a base with an extension on which is mounted a shaft passing through gears and knobs, which in pulling on the knob including a locking means it allows to lower manually the upper part onto the posts, which includes an upper plate provided with the friction rubber strips pressing a lid and preventing it to slide, when the lower plate turns it allows automatically the jar and the upper plate to turn, which activates a gear rack allowing the upper jaws provided with non-skid rubber strips to squeeze the lid until the jar be unscrewed.

The extension of the base from the upper part allows the means locking to block the knob when the jar is removed from the semi-automatic jar opener.

Advantages of the invention:

- No physical strength required from the user;
- Can be operated only with one hand;
- Easy to operate; and
- Does not require to be fixed at any surface.

Brief description of the several views of the drawing(s):

Figure 1 is a front perspective view of the semi-automatic jar opener showing a jar installed;

Figure 2 is a front elevational view thereof;

Figure 3 is a perspective view showing the lower part from the semi-automatic jar opener;

Figure 4 is a perspective view showing the upper part from the semi-automatic jar opener;

Figure 5 is a cut view of the lower mechanism of the semi-automatic jar opener; and

Figure 6 is a cut view of the upper mechanism of the semi-automatic

jar opener.

Detailed description of the invention:

As shown in figures 1, 2, 3 and 5, a semi-automatic jar opener (A) made up of a lower part including a run button (16) activating an electric motor (1) mounted under the lower part, which allows a lower plate (3) to turn and activate a gear rack (10) allowing the lower jaws (4) provided with non-skid rubber strips (19) to squeeze a jar (2) according to the desired size, when the jar (2) turns the friction rubber strips (8) prevent it from sliding, and when the jar is unscrewed the electric motor (1) stops automatically.

As shown in figures 1, 2, 3, 4 and 6, the vertical jagged posts (13) are mounted onto the lower part and engaged inside the apertures of an upper part including a base (17) with an extension (14) on which is mounted a shaft (5) passing through gears (12) and knobs (11), which in pulling on the knob (11) including a locking means (15) it allows to lower manually the upper part onto the posts (13), which includes an upper plate (7) provided with the friction rubber strips (18) pressing a lid and preventing it to slide, when the lower plate (3) turns it allows automatically the jar (2) and the upper plate (7) to turn, which activates a gear rack (9) allowing the upper jaws (6) provided with non-skid rubber strips (20) to squeeze the lid

until the jar (2) be unscrewed.

The extension (14) of the base (17) from the upper part allows the means locking (15) to block the knob (11) when the jar (2) is removed from the semi-automatic jar opener (A).

CLAIM (S)

The embodiments of the invention for which an exclusive property or privilege is claimed, are defined as follows:

I claim:

4: A semi-automatic jar opener made up of a lower part including a run button activating an electric motor mounted under said lower part, which allows a lower plate to turn and activate a gear rack allowing the lower jaws provided with non-skid rubber strips to squeeze a jar according to the desired size, when said jar turns the friction rubber strips prevent it from sliding, and when the jar is unscrewed said electric motor stops automatically.

5: The semi-automatic jar opener of the claim **4** includes the vertical jagged posts which are mounted onto said lower part and engaged inside the apertures of an upper part including a base with an extension on which is mounted a shaft passing through gears and knobs, and which in pulling on the knob including a locking means it allows to lower manually said upper part onto the posts.

6. The upper part of the claim **5** includes an upper plate provided with the friction rubber strips pressing a lid and preventing it to slide, when said

lower plate turns it allows automatically said jar and said upper plate to turn, and which activates a gear rack allowing the upper jaws provided with non-skid rubber strips to squeeze the lid until the jar be unscrewed.

7. The extension of the base from the upper part of the claim **5** allows said means locking to block the knob when the jar is removed from said semi-automatic jar opener.